***Advanced Geothermal Energy Research and Development Act of 2007***
**H.R. 2304**

**Rep. Jerry McNerney (D-CA)**
**Introduced May 14, 2007**

## Summary

H.R. 2304 directs the Secretary of Energy to support programs of research, development, demonstration, and commercial application in advanced geothermal energy technologies. It also establishes or expands several programs for technology transfer and information sharing on geothermal energy.

## Section-by-Section

***Section 1. Short Title***
Act may be cited as the "Advanced Geothermal Energy Research and Development Act of 2007"

***Section 2. Findings***
Geothermal energy is a renewable resource capable of providing baseload power generation (and other applications) with minimal environmental impact. The geothermal energy potential in the United States is widely distributed and vast in size, yet it remains barely tapped. Sustained and expanded funding for research, development, demonstration, and commercial application programs is needed to improve the technologies to locate, characterize, and develop geothermal resources.

***Section 3. Definitions***
Provides definitions for the following terms used in the Act: 'Enhanced Geothermal Systems', 'Geofluid', 'Geothermal', 'Hydrothermal', 'Secretary', and 'Systems Approach'

***Section. 4. Hydrothermal Research and Development***
Instructs the Secretary to support research, development, demonstration, and commercial application of technologies designed to assist in locating and characterizing undiscovered hydrothermal resources. Establishes an "industry-coupled exploratory drilling" program, which is a cost-shared program with industry partners to demonstrate and apply advanced exploration technologies.

***Section 5. General Geothermal Systems Research and Development***
Establishes a program of research, development, demonstration, and commercial application of system components and materials capable of withstanding the extreme environment (high temperatures and corrosiveness) in geothermal wells. Also establishes a program of RDD&CA of improved models of geothermal reservoir performance.

***Section 6. Enhanced Geothermal Systems (EGS) Research and Development***
Instructs the Secretary to support a program of RDD&CA of technologies necessary to advance EGS to a state of commercial readiness. Also establishes a cost-shared, field based program of research, development, and demonstration of technologies to create and stimulate EGS reservoirs.

***Section 7. Cost Sharing***
Establishes guidelines for the ratio of federal/non-federal contributions to cost-shared programs established under this Act. Also describes certain organizational and administrative elements to be integrated into the structure of cost-shared programs.

***Section 8. Centers for Geothermal Technology Transfer***
Provides for the creation of two Centers of technology transfer to function as information clearinghouses for the geothermal industry, dedicated to collecting and sharing industry-relevant information. One Center, to be located in the western US, shall be dedicated to hydrothermal-specific development information; the other Center, located in the eastern US, shall be dedicated to EGS-specific development information.

***Section 9. Study on Advanced Uses of Geothermal Energy***
Requires the Secretary to track technological advances impacting geothermal energy development and advanced uses of geothermal energy and fluids, and report back to the Committee every other year for the next five years (a total of three times).

***Section 10. Authorization of Appropriations***
Authorizes appropriations of $80,000,000 for each of the fiscal years 2008 through 2012.